

MAYERSON, F.Z. (Moskva); MANUKHIN, B.N. (Moskva); PSHENICHNIKOVA, N.G.
(Moskva); ROZANOVA, L.S. (Moskva)

Mediator metabolism of the myocardium in compensatory hyperfunction and hypertrophy of the heart. Pat. fiziol. i eksp. terap 7 no.1:32-36 Ja-F'63.
(MIRA 16:10)

1. Iz laboratorii fiziologii i patologicheskoy fiziologii serdtsa Instituta normal'noy i patologicheskoy fiziologii (dir. - deystvitel'nyy chlen AMN SSSR prof. V.V. Parin)
AMN SSSR.

(ADRENALINE) (HEART—HYPERTROPHY AND DILATATION)
(CHOLINE)

PSHENICHNIKOVA, N.M.

Influence of forest belts and the nature of land utilization in
fields on the insect fauna of interbelt areas. Zool. zhur. 40
no.9:1364-1377 S '61. (MIRA 14:8)

1. All-Union Research Institute of Phytopathology, Moscow.
(Insects, Injurious and beneficial)
(Forest influences)

PSHENICHNIKOV, V. S.

TRUSHICHEV, V. M. - Khudozshnik i, GROMOV, V. L. - Kand. Tekhn. Nauk, POKHLEBES, E. L. -
Arkh., PSHENICHNIKOVA, O. S. - Arkh., BULANOV, Yu. P. - Inzh., BYKOVSKIY, O. L. -
Arkh., BAVAR, G. G. (Rukovoditel'temy) - Kand. Arkhitektury, MAKOTIMSKIY, M. P. -
Arkh., Arkhitektruy, RABINOVICH, I. L. - Arkh., CHERIKOVER, L. Z. - Arkh., ANTRESEVSKIY,
V. G. - Kand Tekhn. Nauk

Nauchnoissledovatel'skiy institut stroitel'noy tekhniki Akademii arkhitektury SSSR

Predlozheniya po oborudovaniyu i otdelke kvartir mnogoetazhnykh zhilykh domov v
moskve (Al'bom)

Page 67

SO: Collection of Annotations of Scientific Research Work on Construction, completed
in 1950. Moscow, 1951

PSHENICHNIKOVA, S.V.

Algorithm for automatic proof of certain theorems of analysis.
Izv. AN Azerb.SSR.Ser.fiz.-tekh. i mat. nauk no.4:65-71 '64.
(MIRA 18:3)

PSHENICHENOV, A.

Ball Bearings

Preventing ball bearings from wearing out too soon. Leg. prom., 12, No. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

PSHENICHNOV, A. V.

29277 Problema fil'truyushchikhsya virusov. Trudy Molotovsk. gos. stomatol.
in-ta, vyp. 8, 1949, s. 331-38

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

PSHENICHNOV, A. V.

29289. K metodnke ochistki shtammov virusa sypnogo tifa. Trudy Molotovsk. gos. stomatol. in-ta, vyp. 8, 1949, s. 353-56

SO: Izvestiya Ak. Nauk Latviyskoy SSR. No. 9, Sept. 1955

Ishenichnov, A. V. AND Mitrofanova, V. I.

"Potential Synergism of Bacteriophage and Penicillin in Vitro and in Experiments With Mice", Trudy Molotovskogo Gos. Med. Inst (Works of the Molotov State Medical Institute), Issues 24-25, pp 269-275, 1950.

Mikrobiologiya, Vol. XX, No. 5, 1951
W-24635

USSR/Medicine - Typhus

FD-1624

Card 1/1 : Pub. 148-4/28

Author : Pshenichnov, A. S.; Raykher, B. I.; and Faydysh, A. T.

Title : Color microagglutination reactions with rickettsial antigens as a method of specifically diagnosing exanthematous typhus

Periodical : Zhur. mikro, epid. i immun. 7, 13-14, Jul 1954

Abstract : An effective microagglutination reaction carried out with drops of serum from suspected typhus patients and standard R. prowazeki strains on objective glasses is described in detail. This method, verified by 10 years of investigation, is extremely accurate, and can be used to diagnose both actual and past cases of typhus, and to test the immunity produced by vaccines. No references are cited.

Institution : Chair of Epidemiology and Microbiology, Molotov Medical Institute and Molotov Oblast Virology Laboratory

Submitted : December 24, 1953

PSHENICHNOV, A.V.; GREMBOVSKAYA, A.Y.

Experimental study of the development of Rickettsia prowazekii
in the body of human head lice. Zhur. mikrobiol. epid. i
immun. 33 no.10:80-83 0'62 (MIRA 17&4)

1. Iz Permskogo instituta vaktsin i sывороток.

PSHENICHNOV, A.V.; RAYKHER, B.I.

Critical comments on the communication of Prof. Tokarevich and his
coworkers on recurrent typhus, published in "Trudy" of the Pasteur
Institute of Epidemiology, Microbiology and Hygiene (1952) Zhur.
mikrobiol. epid. i immun. no.10:114-122 O !54. (MIRA 8:1)
(RELAPSING FEVER.)

Infectious Agents and Toxins

59. Human Lice Strain Adapted to Rabbits

"Production of a Strain of Human Lice Which Feed on Rabbits and Its Significance in the Epidermomembrane Method," by A. V. Pshenichnov and Ye. G. Noskova, Scientific Research Institute of Vaccines and Sera, Voprosy Virusologii, Vol 2, No 1, Jan/Feb 57, pp 53-55

This work discusses advantages of the epidermomembrane method of infecting lice through a capillary membrane prepared from cadaver epidermis. Some of these advantages are: introduction of the inoculum into the organism of the carrier is carried out by natural means, i.e., perorally; the method is simple and provides for rapid infection of large numbers of lice; the insects are not injured through infection; dosage can be measured; and the development and dynamics of virus accumulation in the organism of the infected tick can be studied. According to the author, the method has been improved since its development at the Institute of Vaccines and Sera in 1942. The advantages and disadvantages of this method are compared with those of the Weigl method.

To resolve the difficulties enumerated in the text, it was necessary to develop a variant of lice which could be nourished with rabbit or guinea pig blood for experimental purposes. The task of producing a rabbit-adapted variant was undertaken 5 years ago. Lice from the Molotovskiy Virological Laboratory, maintained for 15 years under experimental conditions, were used. Table 1 shows adaptation of lice to feeding on humans and rabbits, and Table 2 shows later adaptation of lice to feeding only on rabbits. Procedures followed are described in detail in the text.

The article states that this method enables the experimenter to work with any louse-borne infection and eliminates the previous danger of infecting a human donor during nourishment of the lice. Furthermore, lice in any stage of metamorphosis can be used. Use of larva is recommended in view of their intestinal sterility. It was shown that the louse larva is considerably more susceptible to infection with a number of rickettsiae than the adult animal. It is mentioned that the Q fever "virus" must be introduced through the chitinous membrane into the lymph in order to infect mature lice, whereas the larva can be infected orally. It is noted that all known rickettsiae can be adapted to lice.

The work refers to experiments in which lice were infected with several human viruses. Mentioned in particular is the work of A. P. Petrova, which demonstrated that the virus of spring-summer tick-borne encephalitis can be preserved in the louse organism for as long as 10 days. L. B. Gel'dner and N. A. Georgiyevskaya showed in their research that the "Lansing" strain of poliomyelitis virus not only can be preserved for a long time in lice, but can be passed from one insect to another. It is mentioned that the author's own work along these lines is still not conclusive. This article suggests that the adaptation of human viruses to this ideal new nutrient medium is important in that it can be used in neutralization reactions for studying the action of various preparations, the "cytopathogenic effect," etc. The work concludes that the successful production of lice which feed on rabbits extends the possibilities of using the epidermomembrane technique and will aid in resolving a number of problems connected with the study of rickettsiae and filterable viruses. (U)

Sum 1929

PSHENICHNOV, A.V.

Study of virus infections by Perm microbiologists. Vop.virus 2
no.6:331-335 N-D '57. (MIRA 13:5)
(VIRUS DISEASES)

USSR / Microbiology - Microorganisms Pathogenic to Humans and Animals. F-4

Abs Jour: Ref Zhur-Biol., No 9, 1958, 38450.

Author : Pshenichny, A. V. Miktrofanova, V. I.

Inst : Not given.

Title : Method of Bacterial Hapten Adsorption as a Means of Early Diagnosis.

Orig Pub: Molotovsk. med. in-ta, 1957, No 26, 180-183.

Abstract: Various non-specific adsorbents were tested to collect bacterial haptens and subsequently to agglutinize them by a specific antiserum. Bacteria of typhoid fever and paratyphus and *Bacterium proteus*, *X₁₉* were employed as haptens. As adsorbents, talcum,

Card 1/2

USSR/Virology - Viruses in Man and Animals.

E-4

Abs Jour : Ref Zhur - Biol., No 15, 1958, 66942

Author : Pshenichnov, A.V., Manačeva, V.M.

Inst : Molotovsk, med. in-t.

Title : A Search for an Experimental Model of the Hepatitis Virus.

Orig Pub : Tr. Molotovsk. med. in-ta, 1957, vyp. 26, 184-189.

Abstract : Mice possessing Krockcr's sarcoma were innoculated with blood taken from a female patient afflicted with the hepatitis virus. After the subinaculation was completed twice (from tumor to tumor), some of the mice died, after changes occurred in their liver which resembled the liver in man afflicted with hepatitis. At the tenth to twelfth subinoculations, all mice were dead. Analogous results were obtained with liver and tumor filtrates from diseased mice. The serum from convalescent subjects produced a

Card 1/2

4

'USSR/Virology - Rickettsias.

E-5

Abs Jour : Rcf Zhur - Biol., No 15, 66999

Author : Pshenichnov, A.V., Sheveleva, O.N., Noskova, E.G.

Inst :

Title : The Inconstancy of Rickettsias Prowazekii and a Perspective for Preparing Live Epidemic Typhus (Lice-Born) Vaccine.

Orig Pub : Zh. mikrobiol., epidemiol. i immuno-biologii, 1957, No 7,
11-14.

Abstract : The rickettsias prowazekii were kept for $12\frac{1}{2}$ years in body lice, using the epidermomembrane method for passing (440 passages). After that time, the rickettsias from this strain (No 5/6 b) lost their capsules, their toxicity decreased approximately ten-fold, their "anti-leucocytic" properties decreased three-fold. Their virulence for lice increased and that for guinea pigs was lost; only small doses of rickettsias sometimes produced a rise in temperature. This strain was tested as a vaccine on guinea pigs

Card 1/2

9
- 43 -

PSHENICHNOV, A.V.

Result of a survey covering several years on paroxysmal of Volhynia
fiver. Zhur.mikrobiol.epid. i immun. 28 no.10:19-24 O '57.
(MIRA 10:12)
(RELAPSING FEVER,
Volhynia fever, research in Russia (Rus))

PSHENICHNOV, A.V.

"Spring-summer tick-borne encephalitis" by N.N. Gorchakovskoi.
Reviewed by A.V. Pshenichnov. Zhur.mikrobiol.epid. i immun. 29
no.9:140-141 S'58 (MIRA 11:10)
(ENCEPHALITIS)
(GORCHAKOVSKOI, N.N.)

PSHENICHNOV, A.V.; NOSKOVA, Ye. G.; RAYKHER, L.I.; VAYSMAN, I. Sh.

Certain characteristics of post-infection immunity in typhus following
reinfection of guinea pigs in various receptor zones. Zhur. mikrobiol.
epid. i immun. 29 no.10:99-102 O '58. (MIRA 11:12)

1. Iz Permskogo instituta vaktsin i syvorotok.

(TYPHUS, immunol.

post-vaccinal immun. after re-infect. of guinea pigs into
various receptor zones (Rus))

PSHENICHNOV, A.V. (Perm')

Instruction in medical microbiology should be more closely related
to life requirements. Zhur.mikrobiol.epid.i immun. 30 no.8:18-21
Ag '59. (MIRA 12:11)
(MICROBIOLOGY education)

PSHENICHNOV, A.V.; PSHENICHNOV, R.A.; PECHERKINA, S.A.; PLAKSINA, A.N.

Cultivation of some pathogenic Rickettsia on noncellular polysynthetic nutrient media. Zhur. mikrobiol., epid. i immun. 41 no.3:3-7 Mr '64.
(MIRA 17:11)

1. Permskiy institut vaktzin i syvorotok i Permskiy meditsinskiy institut.

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8

PSHENICHNOV, G.I. (Moskva)

Computation of reticular cylindrical shells with arbitrary
framework. Izv vodno stop stroit BAN 37-47 4 '63.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8"

PSHENICHNOV, G.I. (Moskva)

Design of suspension roofs circular in plan. Inzh. zhur. 2
no. 3:189-193 '62.
(MIRA 15:8)

1. Institut mekhaniki AN SSSR.
(Roofs, Suspension)

10,6300

40036

S/258/62/002/002/015/018

I028/I228

AUTHOR: Pshenichnov, G. I. (Moscow)

TITLE: Free oscillations of a netted cylindrical sloping shell

PERIODICAL: Inzhenernyy zhurnal, v. 2, no. 2, 1962, 373-376

TEXT: The paper determines the frequencies of oscillations of the shell in the absence of membrane forces on the shell contour. The differential equations of equilibrium are established, and integrated, under the assumption that the free oscillations of the shell are harmonic, for non-tangential boundary conditions. Formulas of the frequency are obtained for the following cases of non-tangential boundary conditions: hinge fastening of both ends of the shell, rigid fastening of both ends, and rigid fastening of one end and hinge fastening of the other. There is 1 table.

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics AS USSR)

SUBMITTED: February 14, 1962

Card 1/1

PHASE I BOOK EXPLOITATION

SOV/5731

Pshenichnov, Gennadiy Ivanovich

Raschet setchatykh tsilindricheskikh obolochek (Computation of Latticed Cylindrical Shells) Moscow, Izd-vo AN SSSR, 1961. 110 p. 4000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mehaniki.

Resp. Ed.: I.Ya. Shtayerman, Corresponding Member, Academy of Sciences UkrSSR, Professor; Ed. of Publishing House: Yu.G. Drobyshev; Tech. Ed.: G.N. Romanov.

PURPOSE: This book is intended for construction engineers, planners and scientific workers of construction research institutes.

COVERAGE: The book describes a sufficiently precise method of computing the strength and stability of latticed cylindrical shells, taking into account the special basic features of structures. The author's earlier research

Card 1/3

Computation of Latticed (Cont.)

SOV/5731

results, applicable to shells with rectangular lattices, are generalized for shells with rhomboidal lattices. The book contains tables, compiled by electronic computers, for computing the strength of latticed cylindrical shells of different geometrical dimensions and surface loads. The author mentions the following personalities: I.Ye. Mileykovskiy, O.D. Oniashvili, N.V. Akhvlediani, G.S. Shakhramanov, S.I. Peselnik, and thanks E.P. Borisova. There are 13 references: 12 Soviet and 1 German.

TABLE OF CONTENTS:

Foreword	3
Conventional Symbols	6
Ch. I. Basic Relations of the Theory of Latticed Cylindrical Shells	8
Accepted assumptions. Elasticity relations	8
Differential equation of equilibrium	8
Reducing a system of differential equations of equilibrium to a single equation	12
	14

Card 2/3

L 2783-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(b)/ETC(l) WW/EM
ACCESSION NR: AP5021528 UR/0258/65/005/004/0685/0690
534.014.1

3/
B

AUTHOR: Pshenichnov, G. I. (Moscow)

TITLE: Small free vibrations of elastic surfaces of revolution (shells)

SOURCE: Inzhenernyy zhurnal, v. 5, no. 4, 1965, 685-690

TOPIC TAGS: free vibration, shell vibration, elastic vibration

ABSTRACT: The free vibrations of elastic surfaces (shells) of revolution are considered. The system of equations for the free vibrations is obtained by assuming

$$X = -2ph \frac{\partial^2 u}{\partial \theta^2}, \quad Y = -2ph \frac{\partial^2 v}{\partial \theta^2}, \quad Z = -2ph \frac{\partial^2 w}{\partial \theta^2}$$

in the general differential equations of motion (A. L. Gol'denveizer. Teoriya uprugikh tonkikh obolochek. Gostekhizdat, 1953). The case of shells of revolution for which

$$A = A(\alpha), \quad B = B(\alpha), \quad R_1 = R_1(\alpha), \quad R_2 = R_2(\alpha).$$

is considered. Assuming harmonic vibrations of the form
Card 1/3

L 2783-66

ACCESSION NR: AP5021528

$$u = U \cos n \beta \cos \omega t, v = V \sin n \beta \cos \omega t, w = W \cos n \beta \cos \omega t, \text{ where } U = \\ = U(\alpha), V = V(\alpha), W = W(\alpha),$$

the eigenvalues ω and eigenfunctions U , V , and W of the differential equations are sought for boundary conditions

$$U = V = 0,$$

$$W = \frac{dW}{d\alpha} = 0 \text{ and } W = \frac{d^2W}{d\alpha^2} = 0.$$

(on $\alpha = \alpha_1$ and $\alpha = \alpha_2$). Using the asymptotic integration method described by

A. L. Gol'denveizer (Asimptoticheskiye svoystva sobstvennykh znacheniy v zadachakh teorii tonkikh uprugikh obolochek. Prikl. matem. i mekh., t. XXV, vyp. 4, 1961), the functions U , V , and W can be determined after assuming that they consist of the sum of two terms corresponding to the solutions of the approximate equations (shell thickness $\rightarrow 0$) and the large variation equations. It is shown that vibrations exist for which the frequencies and the tangential displacement functions (u, v) can be obtained from the dynamic analog of the static, no-moment equations ($h \rightarrow 0$) and the tangential boundary conditions. It is also indicated that for a range of vibrations the frequencies and bending function (w) can be found from the dynamic analog of the static stress equations and the

Card 2/3

L 2783-66

ACCESSION NR: AP5021528

O
nontangential boundary conditions. In a third region of frequencies the solutions can be obtained only by solving the complete equations and boundary conditions. Orig. art. has: 12 formulas.

ASSOCIATION: none

SUBMITTED: 17Feb65

ENCL: 00

STB CODE: AS, ME

NO REF SOV: 002

OTHER: 000

Card 3/3 Red

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8

(Russian original - see below)

The natural vibrations of elastic shells of revolution. Inzh. zhur.
no. 4:685-690 '65. (MIRA 18:9)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8"

BROUDE, V.M.; PSHOENICHNOV, G.I. (Moskva)

Comments on A.P. Filin's article "Stability of prestressed structural components" (Izvestiia AN SSSR, OTN, no.12, 1957).
Izv. AN SSSR. Otd. tekhn. nauk. Mekh. i mashinostr. no.4:200
J1-Ag '59. (MIRA 12:8)
(Prestressed concrete construction) (Filin, A.P.)

PSHENICHNOV, Gennadiy Ivanovich; SHTAYERMAN, I.Ya., prof., otv. red.;
DROBYSHEV, Yu.G., red. izd-va; ROMANOV, G.N., tekhn. red.

[Calculation of latticed cylindrical shells] Raschet setchatykh
tsilindrcheskikh obolochek. Moskva, Izd-vo Akad. nauk SSSR,
1961. 110 p. (MIRA 14:8)

1. Chlen-korrespondent AN USSR (for Shtayerman)
(Roofs, Shell)

SOV/124-58-5-5719

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6, p 114 (USSR)

AUTHOR: Pshenichnov, G. I.

TITLE: On the Calculation of Cambered-skeleton Systems (K raschetu kruzhal'no-setchatykh sistem)

PERIODICAL: Soobshch. AN GruzSSR, 1957, Vol 18, Nr 4, pp 441-448

ABSTRACT: A method of calculation of cylindrical screen-type shells of circular outlines is described based on the engineering theory of shells. Expressions are given for the determination of the displacements, stresses, and moments for a case of free support of the curved edges of the shell on two types of diaphragms - one, rigid in its own plane, and the other elastic in its own plane.

A. K. Mroshchinskiy

1. Cylindrical shells--Mathematical analysis

Card 1/1

PSHENICHNOV, G. I. (Moskva)

Statistical calculation of flat latticed cylindrical shells.
Inzh.sbor. 27:171-178 '60. (MIRA 13:6)
(Structural frames)

187E NICHANOV, G. I.

PELISH I BOOK INFORMATION REV/4/521

Akademiya nauk SSSR. Institut mehaniki

Dokladei 207, [Serial], tom 26, Engineering Symposium, Vol. 26) Moscow, 1959.
206 p., 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdelenie tekhnicheskikh nauk.

District: ~~minoboroni~~.

Bud. N. I. A. A. D'yubina; N. I. Pleshchakov; Tech. M. I. B. M. Lerman.

PURPOSE: This book is intended for engineers.

CONTENTS: The book contains 29 articles dealing with professional work performed by mechanical engineers such as the calculations of beams, rods, and plates, and solutions of problems in stress distribution and equilibrium. Oscillations (including flutter) and deformation of shells, equilibrium of shell plates, rods and solids, stability of rods, plates, frames and other members, stress concentration, and bending are discussed. Oscillations of aircraft wings are studied. References accompanying each article.

Barinov, I. S. [Review]. Concerning the Question of Plastic Equilibrium of a Particular Panel in a Slanting Shell With End Deflections [Received on 1/6/1958] 49

Bazant, M. A. [Review]. Information on a Free Cylindrical Shell Under Impact-Pressured on 5/8/1958] 54

Pleshchakov, G. I. [Review]. Concerning the Calculation of Slanting Cylindrical Shells [Received on 1/8/1958] 59

Lashkin, A. M. [Review]. Concerning the Calculation of Certain Parts With Reinforced Components [Received on 10/7/1958] 66

Valeev, V. A. [Review]. Natural Oscillations of Parametric Type [Received on 5/12/1958] 78

Gritsay, A. S. [Review]. Two Simple Problems in Elastic Equilibrium With Large Displacements [Received on 9/1/1958] 85

Mil'shtein, E. K. [Review]. Concerning the Calculation of Elastic Contact of Cylinders Contacted Together in Individual Points [Received on 12/10/1958] 87

Dobrovolskiy, R. I. [Review]. Certain Questions of Fundamental Base Functions [Received on 5/16/1958] 94

Karabut, M. D. [Review]. Experimental Testing of "Performance of an Orbitropic" [Editorial Board] [Received on 1/25/1958] 101

Solntsev, F. V. [Review]. Elastic Equilibrium of Solids of Revolution [Received on 11/10/1958] 113

Ishlinskii, Y. M. [Review]. Approximate Solution of a Problem Relating to Toroidal Particles [Received on 1/2/1958] 127

[Received on 6/12/58]

Ushakova, A. I. [Review]. Kinetic Equilibrium of a Cylindrically Anisotropic Rod Under a Load Uniformly Distributed Longitudinally [Received on 12/1/1958] 135

Poznyak, M. M. [Review]. Stability of Rods and Plates Beyond the Elasticity Limit [Received on 5/2/1958] 151

Ushakova, T. Yu. [Unpublished]. Stress Concentration Under Simple Bending of an Orbitropic Plate Restored by a Circular Hole [Received on 2/20/1958] 179

PSHENICHNOV, G.I.

Design of curved lattice systems. Soob. AN Gruz.SSR 18
no.4:441-448 Ap '57. (MIRA 10:7)

1. Institut stroitel'nogo dela, Tbilisi. Predstavлено членом-
корреспондентом Академии О.Д. Ониашвили.
(Roofs, Shell)

PSHENICHNOV, G. I. (Moskva)

Stability of perforated cylindrical flat shells. Inzh.sbor. 29:
77-79 '60. (MIRA 13:10)

(Elastic plates and shells)

NAME & BOOK EXPLOITATION	SOV/1000	SOV/12-4-27
Andrei's cult SSSR. Institut matematiki Institut matematiki, t. 27 (Bardovits Collection, Vol. 27) Moscow, Izd-vo AK SSSR, 1960. 210 p. 2,000 copies printed.		
Sponsoring Agency: Academy наук SSSR. Otdeleniye tekhnicheskikh nauk.		
Ref.: Ed. A. A. Tsyrdin; Ed. V. M. Akhmedov Ed. of Published Edition:		
V.M. Akhmedov Tech. Ed.; A.P. Gusarov.		
PURPOSE: This book is intended for engineers, applied physicists, and applied mathematicians.		
OVERVIEW: The book consists of 21 articles on such problems as viscoelasticity, compressive flow theory of shells, stability, plasticity and elasticity, the bending of thin plates and shells, and various aspects of applied mechanics. No personalities are mentioned. References accompany most of the articles.	54	
Mil'kov, N.V. On the Problem of Biplanar Gas by Water	54	
Bolotin, V.V. Application of Statistical Methods to the Evaluation of the Strength of Structures Subjected to Seismic Forces	54	
Kryuchkov, A.A. The Behavior of Complex Eigen Values in the Problem of Thin Plates	70	
Slobodchikov, A.M. Stability of an Elastic Beam With Rigid Supports in Biperiodic Flow	77	
Shnirel', Yu.S. Vibrations of an Elastic String	81	
D'yachkov, A.A. Elasto-plastic Stability of Structure Considered As Elastic Elements	87	
Kopyev, S.M. Stability of Circular Thin Plates Beyond the Elastic Limit	92	
Zubchenko, V.D. Stability of Structural Rods Beyond the Plastic Limit	101	
Sternin, I.S. On the Bending of a Closed Cylindrical Shell by Concentrated Forces	114	
Sternin, I.S. Shells in a Physical Medium Weakened by Elliptical and Circular Holes	124	
D'yachkov, A.G. Determination of Structures Covered by Pressing Several Circular Washers Into a Plate With Vertical Intervallae	137	
Mil'kov, N. On the Practical Calculation of Bending Moments of Shells Supported by a Rectangular Plate	162	
Akhmedov, G.I. Statistical Calculation of Lattice Cylindrical Shelling Shells	171	
Slobodchikov, A.M. Contact Method in the Coupling of a Cylindrical Shell of Open and Closed Profile	179	
Sundarayev, Ye.Y. Symmetric Bending of Isotropic and Some-Grouped Orthotropic Shells of Revolution Taking Into Account Large Deformations and an External Temperature Field	185	
Murzin, N.S. Lower Limit of a Elastically Medium Admissible Load	200	
Lavrik, D.R. Konegraphic Solution of Equations of the Fourth and Fifth Degrees	203	
Sternin, N.D. Application of the Method of Asymptotic Integration to the Solution of the Equation of the Natural Vibrations of Shells	207	
AVAILABILITY: Library of Congress		

sov/179-59-4-39/40

24(6)

AUTHORS:

Broude, V. M., Pshenichnov, G. I.

TITLE:

Remark on the Article by A. P. Filin "On the Stability of
Prestressed Construction Elements" (Izvestiya AN USSR, OTN,
Nr 12, 1957)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye tekhnicheskikh nauk. Me-
khanika i mashinostroyeniye, 1959, Nr 4, p 200 (USSR)

ABSTRACT:

An error in the paper by Filin is pointed out. It is shown that, under the conditions assumed there, the critical P-value cannot depend on P_0 . Equation (2.4) neglects the term considering the work of the initial force in the concrete at the bulging of the bar. By correcting this error, the term with P_0 disappears.

Card 1/1

PSHENICHNOV, G. I. Cand Tech Sci -- (diss) "The ~~Calculation~~^{Design} of Curved-Grid Shells as Spatial Systems." Mos, 1957. Cover, 4 pp 19 cm. (Academy of Sciences USSR, Inst of Mechanics), 120 copies. (KL, 26-57, 109)

PSHENICHNOV, G.I. (Moskva)

Calculating a zero-torque spherical shell for wind load. Inzh.
(MIRA 15:2)
zhur. 1 no.3:173-175 '61.

1. Institut mekhaniki AN SSSR.
(Roofs, shell)

KUZNETSOV, Yu.A.; MAKAROV, A.A.; MELENT'YEV, L.A.; MERENKOV, A.P.; NEKRASOV, A.S.; TSVETKOV, N.I.; KUZNETSOV, Yu.A.; MAKAROVA, A.S.; KARPOV, V.G.; MANSUROV, Yu.V.; SIROV, Yu.P.; KHRILEV, L.S.; TSVETKOVA, L.A.; VOYTSEKHOVSKAYA, G.V.; YEFIMOV, N.T.; LEVENTAL', G.B.; KHANAYEV, V.A.; BELYAYEV, L.S.; GAM, A.Z.; KARTELEV, B.G.; KRUMM, L.A.; LIOPO, T.N.; SVIRKUNOV, N.N.; DRUZHININ, I.P.; KONOVALENKO, Z.P.; KHAN'YANCOVA, N.V.; SHVARTSBERG, A.I.; NIKONOV, A.P.; STARIKOV, L.A.; POPYRIN, L.S.; PSHENICHNOV, N.N.; TROSHINA, G.M.; CHEL'TSOV, M.B.; SVETLOV, K.S.; SUMAROKOV, S.V.; TAKAYSHVILI, M.K.; TOLMACHEVA, N.I.; KHASILEV, V.Ya.; KOSHELEV, A.A.; KUDINOVA, L.I., red.

[Methods for using electronic computers in the optimization of power engineering calculations] Metody primeneniia elektronno-vychislitel'nykh mashin pri optimizatsii energeticheskikh raschetov. Moskva, Nauka, 1964. 318 p.
(MIRA 17:11)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Energeticheskiy institut. 2. Chlen-korrespondent AN SSSR (for Melent'yev).

L 35103-65

UR/0104/84/000/008/0021/0027

ACCESSION NR: AF5009727

AUTHOR: Popov, I. S. (Candidate of technical sciences); Pshenichnov, N. N.
(Engineer)TITLE: Determination of optimal values of the final parameters and characteristics
of the condenser unit of the K-500-240 turbogenerator set with the aid of a
computer

SOURCE: Elektricheskiye stantsii, no. 8, 1964, 21-27

TOPIC TAGS: steam turbine, steam auxiliary equipment, thermoelectric generator,
computer/K-500-240 turbogeneratorABSTRACT: The method of technico-economic determination of the optimal
values of the final parameters of condenser units for steam turbines based
on the use of electronic computers make possible more complete, rapid, and
accurate consideration of a large number of interrelated operating factors.
The results of calculations on the K-500-240 turbogenerator set give a
rather complete picture of the characteristics and parameters of the con-
denser unit with reference to various conditions of turbogenerator operation
in different parts of the 555 R. The plant variant of the condenser unit of

Card 1/2

L 35103-65

ACCESSION NR: AP5009727

the K-500-240 turbogenerator set is appropriate by virtue of its specifications for use in expensive-fuel regions, but not in cheap-fuel region, where the great majority of these units will be installed. The production of condensation equipment for the K-500-240 turbogenerator set with parameters determined for operating conditions in cheap-fuel regions will allow an improvement in the economy of the unit (a reduction of calculated expenditures by 28-50 thousand rubles per annum).

Orig. art. has: 4 graphs, 4 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: EE, IE

NO REF Sov: 004

OTHER: 000

JPRS

Card 2/2

POPYRIN, L.S., kand.tekhn.mnuk; ISHENICHNOV, N.N., inzh.

Selection of optimal cross section dimensions of the exhaust
system and low-pressure units of large condensing turbine units.
Teploenergetika 12 no.1:30-35 Ja '65.

(MIRA 18:4)

1. Energeticheskiy institut Sibirskego otdeleniya AN SSSR.

CHELYSHEV, N.A.; DROSHCHINSKIY, V.M.; DARUSHIN, R.I.; KRITININ, I.A.;
PSHENICHNOV, P.I.; KUCHKO, I.I.

Deformation of the metal in T-shaped passes during the rolling
of R-50 type rails. Stal' 24 no.11:1013-1016 N '64.
(MIRA 18:1)

1. Kuznetskiy metallurgicheskiy kombinat.

PLANKINA, A.V., inzh.; BELIKOV, P.Ye., inzh.; PSHENICHNOV, P.I.

Use of large cast steel rolls. Stal' 22 no.2:141-145 F '62.
(MIRA 15:2)
(Rolls (Iron mills))

PSHENICHOV, V. A.

USSR/Medicine - Microorganisms
Medicine - Bacteria, Gram-Negative

Jan 49

"Study of Microflora of the Kungur Ice Cavern," A. P. Volodin, V. A. Pshenichov, 3½ pp

"Priroda" No 1

Little has been done to study life found in subject cavern. Summarizes work done by various scientists and by the authors, and records results of investigations and tests of the air and waters in various grottoes of the cavern. Tests of more infested grotto revealed 500,000 bacteria in one gram of earth. Of bacteria found, 75% were gram negative. Found only individual families of bacillus and coccus. Rarely found torula and penicillium.

PA 47/49T64

PSHENICHNOV, R.A.; KOLEVATOVA, Ye.A.

Opsonophagocytic test in Volyn' rickettsiosis. Zhur. mikrobiol.,
epid. i immun. 41 no.9:144-145 S '64. (MIRA 18:4)

1. Permskiy institut vaktsin i syvorotok.

PSHENICHNOV, R.A.; BURYLOVA, A.M.

New method for the evaluation of the effect of systemic insecticides
on body lice; a preliminary report. Med. paraz. i paraz. bol. 33
no.5:614-615 S-0 '64. (MIRA 18:4)

1. Virusano-rikketsiosnyy otdel Permskogo nauchno-issledovatel'skogo
instituta vaksin i syvorotok.

PSHENICHNOV, A.V.; PSHENICHNOV, R.A.; PECHERKINA, S.A.; PLAKSINA, A.N.

Cultivation of some pathogenic Rickettsia on noncellular polysynthetic nutrient media. Zhur. mikrobiol., epid. i immun. 41 no.3:3-7 Mr '64.
(MIRA 17:11)

1. Permskiy institut vaktsin i syvorotok i Permskiy meditsinskiy institut.

PSHENICHNOV, R.A.

Utilization of radioactive radiation in the preparation of
rickettsial antigens. Zhur.mikrobiol.epid. i immun. 30
no.3:118-120 Mr '59. (MIRA 12:5)

1. Iz Permskogo instituta vaktsin i syvorotok.
(RICKETTSIA,
antigen, radioactive sterilization (Rus))

PSHENTCHEV, V. A.

Experimental Observations on Typhus Immunity." Cand Med Sci,
Sverdlovsk Medical Inst, Molotov, 1954. (RZhBiol, No 3, Feb 55)

SO: Sum. No. 631, 26 Aug. 55 - Survey of Scientific and Technical Dissertation Defended at USSR Higher Educational Institutions.
(14)

POKHRENIKOV, V. A.

28978 Mikroflora Kongurskoy Ledyanoy poschchery. Trudy Molotovsk, gos.
Stomtol. In-Ta, Vyp. 8, 1949, S 393-402 Bibliogr: 11 Nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

PSHENICHNOV, V.A.; LEVASHOV, A.A.; NIKOLENKO, V.Ya.

Biological characteristics of vaccinal strain ~~X~~ of Rickettsia prowazekii; observations on the immunization of humans with live typhus vaccine. Vop.virus. 4 no.6:698-703 N-D '59. (MIRA 13:3)
(TYPHUS immunol.)
(VACCINATION)

URAKOV, N.N.; PSHENICHNOV, V.A.; SHCHETININ, V.P.; TERESHCHENKO, M.O.

Materials on the immunization of man with live exanthematos
typhus vaccine from the E strain. Zh. mikrobiol. 40 no.7:
40-45 Jl '63 (MIRA 17:1)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8

PSHENICHNOV, V.A.

Observations of a strain of Rickettsia prowazekii with decreased pathogenicity. Vop. virus. 6 no.6:724-728 N-D '61. (MIRA 15:2)
(RICKETTSIA)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8"

PSHENICKINOV, V. A.

"Study of Bacterial Flora of the Genghis Khan River,"
"Priroda," No. 1, 1949.

R. VOLODIN, A. P.

PSHENICHNOV, Ye.A.

Tunnel effect in the case of a double potential barrier. Dokl.
AN SSSR 143 no.4:915-918 Ap '62. (MIRA 15:3)

1. Institut khimicheskoy fiziki AN SSSR. Predstavлено академиком
V.N.Kondrat'yevym.

(Chemical reaction, Rate of)
(Chemistry, Physical and theoretical)

24.7700

37922

S/181/62/004/005/006/055
B102/B104

AUTHOR:

Pshenichnov, Ye. A.

TITLE:

Tunneling through a system of similar potential barriers

PERIODICAL: Fizika tverdogo tela, v. 4, no. 5, 1962, 1113-1117

TEXT: A periodic potential such as occurs in crystals is considered and the tunnel effect in such a potential is investigated in one-dimensional approximation. The potential $V(x)$ is considered to have $N-1$ wells of arbitrary but similar form. The tunneling coefficient $Q(E)$ is calculated in the semiclassical approximation for the passage of particles of mass μ and energy E ($0 < E < V_0$, V_0 = height of the lowest non-zero barrier) through a system of N barriers. If

$$\cos^2 \sigma(e^\tau + \frac{1}{4} e^{-\tau})^2 < 1$$

(6),

one has

$$Q(E) = \left[\cos^2 N u + \frac{\sin^2 N u}{\sin^2 u} \sin^2 \sigma \left(e^\tau + \frac{1}{4} e^{-\tau} \right)^2 \right]^{-1/2} \quad (9); \text{ if}$$

Card 1/4

S/181/62/004/005/006/055
B102/B104

Tunneling through a system ...

$$\cos^2 \sigma \left(e^r + \frac{1}{4} e^{-r} \right)^2 > 1 \quad (6)$$

one has

$$Q(E) = \left[\operatorname{ch}^2 Nu + \frac{\operatorname{sh}^2 Nu}{\operatorname{sh}^2 u} \sin^2 \sigma \left(e^r + \frac{1}{4} e^{-r} \right)^2 \right]^{-1}. \quad (7)$$

As $\lambda^2 - 2\cos\sigma(e^r + e^{-r}/4)\lambda + 1 = 0$, u satisfies

$$\cos u = \left(e^r + \frac{1}{4} e^{-r} \right) \cos \sigma. \quad \operatorname{ch} u = \left(e^r + \frac{1}{4} e^{-r} \right) \cos \sigma.$$

$$\frac{1}{h} \int_{\tau_{n+1}}^{\tau_n} |p| dx = \tau_{n+1}; \quad \frac{1}{h} \int_{\tau_n}^{\tau_{n+1}} pdx = \sigma_n.$$

$\tau_1 = \tau_2 = \dots = \tau_N = \tau$. $\sigma_1 = \sigma_2 = \dots = \sigma_N = \sigma$. Then each barrier has the height V_0 and can have quasisteady states for $0 < E < V_0$. If $e^r \gg 1$, the energy spectrum can be represented by that of one well whose quasisteady levels E_m^0 are all split into $(N-1)$ sublevels ($E_{m,n} = E_m^0 \pm \Delta E_{m,n}$). These

Card 2/4

Tunneling through a system ...

S/181/62/004/005/006/055
B102/B104

states. Professor N. D. Sokolov is thanked for discussions. There is
1 figure.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR Moskva (Institute of
Chemical Physics AS USSR, Moscow)

SUBMITTED: November 30, 1961

Card 4/4

PSHENICHNOV, Ye.A.

Tunneling through a system of equal potential barriers. Fiz.
tver. tela 4 no.5:1113-1117 My '62. (MIRA 15:5)

1. Institut khimicheskoy fiziki AN SSSR, Moskva.
(Quantum theory)

PSHENICHNOV, Ye.A.; SOKOLOV, N.D.

Quantum effects in a double potential well and spectroscopy
of the hydrogen bond. Opt.i spektr. 11 no.1:16-23 J1 '61.
(MIRA 14:10)
(Hydrogen bonding) (Quantum theory) (Spectrum analysis)

PSHENICHNOV, Ye.A.; SOKOLOV, N.D.

Mechanism of reactions involving proton transfer in polar
solvents. Kin. i kat. 6 no.5:802-808 S-0 '65. (M23 12073)

I. Institut khimicheskoy fiziki AN SSSR.

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8

PSHENICHNOV, Yu.P.

Occurrence of dendrite rain. TSvet. met. 38 no.9:82-84 S '65.
(MIRA 18:12)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8"

L 3081-66 EWT(m)/EWP(t)/EWP(b) JD

ACCESSION NR: AP5023997

UR/0020/65/164/002/0305/0306

539.374+539.379.4

33

30

AUTHOR: Bochvar, A. A. (Academician); Pshenichnov, Yu. P.; Chuvilina, I. N.

55

55

35

B

TITLE: On the growth of deformation twins

SOURCE: AN SSSR. Doklady, v. 164, no. 2, 1965, 305-306, and insert facing p. 306

TOPIC TAGS: twinning, bismuth, zinc, metal crystal, compressive stress

ABSTRACT: To check the hypothesis that the growth of deformation twins occurs during the load removal and reloading, the sample under load was observed directly in the course of the entire experiment. A microscope was attached to a Brinell press, which served to compress the samples at room temperature. The samples consisted of cast macrocrystalline samples of zone-refined Bi (>99.999%), commercial Bi (>98.5%), and Zn (>99.99%). It was noted that twins were formed in zone-refined Bi as soon as the maximum specified compressive load was reached (110 kg; equivalent to a stress of 1.2 kg/mm²). Twins appeared in zone-refined Bi at loads 1.5 to 2 times smaller than in commercial Bi, and their growth rate was faster. Certain twins, formed at a given load did not show any further growth either during cyclic

Card 1/2

L 3081-66

ACCESSION NR: AP5023997

loading or when the load was increased; this was particularly apparent in the commercial Bi. Results of direct observations of the development of deformation twins were compared with changes in the size of twins subjected to cyclic loading with a constant maximum load. In all metals, the appearance of new twins, an increase in the size of old ones, and fusion of the twins were observed. It is concluded that under prolonged loading, the observed growth of twins does not occur when the maximum constant load is acting, but rather during periods when the stress condition changes, i.e., when the load is temporarily removed or brought back up to its previous value. Orig. art. has 3 figures.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

55

SUBMITTED: 12Jun65

ENCL: 00

SUB CODE: MM, SS

NO REF Sov: 092

OTHER: 000

Pure metal 18

lehr
Card 2/2

L 2672-66 EWT(m)/EWP(i)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) MJW/JD
ACCESSION NR: AP5021888 UR/0020/65/163/006/1375/1376

AUTHORS: Bochvar, A. A. (Academician); Pshenichnov, Yu. P. 44,55 40
TITLE: Investigating the nature of distribution and density of etching figures in aluminum 30 12 7,44,55

SOURCE: AN SSSR. Doklady, v. 163, no. 6, 1965, 1375-1376, and insert facing p. 1376

TOPIC TAGS: aluminum, etched crystal, experimental method

ABSTRACT: The nature and density of etching figures in cast, deformed, and recrystallized aluminum specimens with trade mark AVOOO (99.99%) was investigated. To map the surface, a deep etching was carried out first in a 150 g/liter NaOH solution at 70° temperature and for a 30-minute duration. The specimens were then electropolished and etched on etching figures in a solution of 47% HNO₃ + 50% HCl + 3% HF. The density analysis was made on two geometrical forms: triangular, near the (111) plane, and square-shaped, near the (100) plane. The etching figure densities were tabulated and presented as a histogram. Analysis of the histograms showed that the law of etching figure distribution is the same in all cases, the number being of the same order of magnitude for the cast, deformed,

Card 1/2

L 2672-66

ACCESSION NR: AP5021388

10

and recrystallized specimens. In all three types of aluminum specimens the etching density was of the order $10^5/\text{cm}^2$. Finally, the nature of these etching figures was found to remain unchanged from the cast to the recrystallized specimens. "The authors express their gratitude to L. B. Zlotin for mirror-finish rolling the aluminum specimens and to N. S. Gerchakova for her help in the experiments." Orig. art. has: 1 figure and 1 table.^{44,55} 44,55

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys) ^{44,55}

SUBMITTED: 21May65

ENCL: 00

SUB CODE: MM

NO REF Sov: 000

OTHER: 001

Card 2/2 

ACC NR: AR6020051

SOURCE CODE: UR/0276/66/000/001/B056/2086

AUTHOR: Il'yushko, Ye. G.; Kiryukhin, Yu. I.; Pshenichnov, Yu. P.

TITLE: Methods for reducing warpage in components made from aluminum alloys

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 1B620

REF SOURCE: Sb. dokl. k Novosib. nauchno-tekhn konferentsii po mashinostr.
Novosibirsk, 1964, 141-147

TOPIC TAGS: aluminum alloy property, alloy heat treatment

ABSTRACT: It is shown that warping in aluminum components with large dimensions and the formation of cracks are due to the harmful effect of internal stresses. One effective method for eliminating internal stresses in components made from aluminum alloys is quenching of these components in hot or boiling water. The level of internal stresses is reduced by the reduction in temperature gradient. For instance, when AK4-1 and AK-6 alloys are quenched in boiling water, internal stresses are reduced to 10-15 kg/mm² in comparison with 28-30 kg/mm² after quenching in cold water. Another effective method for reducing warpage in components is the use of a special mandrel during mechanical finishing. 3 illustrations, 3 tables, bibliography of 3 titles.
L. Tikhonova. [Translation of abstract]

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8

PSHENICHNYY, B.N. (Kiyev); ONOPCHUK, Yu.N. (Kiyev)

One application of the dual algorithm. Zhur. vych. mat. i mat.
fiz. 5 no.2:372-376 Mr-Ap '65. (MIRA 18:5)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8"

PSHENICHNOV, Yu.P.

Pickling streaks in AB000 aluminum ingots. TSvet. met. 38
no.11:114-115 N '65. (MIRA 18:11)

PSHENICHNOV, Yu.P.; MUKHAYEV, V.V.

Investigating the degree of deformation of ring-shaped specimens.
Metalloved. i term. obr. met. no.7:19-21 Jl '64. (MIRA 17:11)

PSHENICHNOVA, A. A., Cand Ned Sci -- (diss) "Effect of myotics: pilo-carpina, furanone and benzamona on the permeability of vessels of the anterior portion of the eye of the rabbit. Experimental research." Leningrad, 1960. 14 pp; (Academy of Sciences USSR, Inst of Physiology im I. P. Pavlov); 220 copies; free; (KL, 22-60, 144)

GILLERSON, A.B., prof.; PSHENICHNIKOVA, A.S.

Effectiveness of diathermocoagulation in the "cervical" form
of sterility. Vop. okhr. mat. i det. 6 no.6:44-47 Je '61.
(MIRA 15:7)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B.
Gillerson) Omskogo meditsinskogo instituta imeni M.I. Kalinina.
(STERILITY) (ELECTROSURGERY)

PSHENICHNOV, A.V.; MINAYEVA, V.M.; STARODUBTSEVA, G.I.

Epidemiology of tick-borne encephalitis in the Urals. Vop.virus.
7 no.6:661-665 N-D '62. (MIRA 16:4)

1. Permskiy institut vaktsin i syvorotok.
(URAL MOUNTAIN REGION—ENCEPHALITIS)

S/879/62/000/000/066/088
D234/D308

AUTHOR: Pshenichnov, G. I. (Moscow)

TITLE: Design of shallow spherical latticed shells

SOURCE: Teoriya plastin i obolochek: trudy II Vsesoyuznay konfrensi, L'vov, 15-21 sentyabrya 1961 g. Kiev, Izd-vo AN USSR, 1962, 379-381

TEXT: The shell consists of intersecting elements situated on a sphere. Bending rigidity in the tangent plane and torsional rigidity are neglected. The author gives the system of differential equations found by a method stated by himself in a previous publication. In the case of a square lattice with a rigidly clamped circular edge, the distance between nodes being a , the solution is

$$u = \frac{\alpha}{105} (\rho_0^2 - \alpha^2 - \beta^2) [35C_2 + 7C_4 (3\rho_0^2 + 3\alpha^2 + 7\beta^2) +$$

Card 1/3

S/879/62/000/000/066/088
D234/D308

Design of shallow ...

$$+ 3C_6(5\rho_0^4 + 5\rho_0^2\alpha^2 + 11\rho_0^2\beta^2 + 5\alpha^4 + 19\beta^4 + 16\alpha^2\beta^2);$$

$$v = \frac{1}{105} (\rho_0^2 - \alpha^2 - \beta^2) [35C_2 + 7C_4(3\rho_0^2 + 3\beta^2 + 7\alpha^2) +$$

$$+ 3C_6(5\rho_0^4 + 5\rho_0^2\beta^2 + 11\rho_0^2\alpha^2 + 5\beta^4 + 19\alpha^4 + 16\alpha^2\beta^2)];$$

$$w = \frac{3K}{\rho_0^4} (\rho_0^2 - \alpha^2 - \beta^2)^2 \left[1 + 6D + \frac{28}{\rho_0^2} (\alpha^2 + \beta^2) \right] \quad (5)$$

where

Card 2/3

S/879/62/000/000/066/088
D234/D308

Design of shallow ...

$$c_2 = \frac{6(13 - 6D)}{\rho_0^2} K, \quad c_4 = \frac{3(6D - 55)}{\rho_0^4} K, \quad c_6 = \frac{84}{\rho_0^6} K,$$

$$K = - \frac{35aR^2 p}{2EF(280 + 281D + 6D^2)} \quad (5)$$

Card 3/3

MERLIN, V.S., prof., red.; PSHENICHNOV, V.V., dots., zam. red.;
SMIRNOV, M.I., dots., red.; PESKAYA, A.V., kand. pednauk, red.

[Problems in the psychology of personality and the psychology
of work] Problemy psichologii lichnosti i psichologii truda.
(MIRA 16:6)
Perm' 1960. 201 p.

1. Perm' Gosudarstvennyy pedagogicheskiy institut. 2. Permskiy
pedagogicheskiy institut (for Merlin).
(Personality) (Psychology, Applied)

PSHENICHNOV, V.V.

Organization of the Ural branch of the Society of Psychologists.
Vop.psikh. 4 no.4:186-188 Jl-1g '58. (MIRA 11:11)
(Psychology--Societies)

5 (4)

AUTHORS:

Vetchinkin, S. I., Pshenichnov, Ye. A., Sov/76-33-6-16/44
Sokolov, N. D.

TITLE:

Influence of the Hydrogen Bond on the Energy of the Ion Lattice of Ammonium Chloride and Evaluation of the Affinity of Ammonia Molecules to the Proton (Vliyaniye vodorodnoy svyazi na energiyu ionnoy reshetki khloristogo ammoniya i otsenka srodstva molekuly ammiaka k protonu)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 6,
pp 1269-1274 (USSR)

ABSTRACT:

It may be assumed that in ion crystals containing H_3O^+ or NH_4^+ ions, between cation and anion beside the Coulomb forces there is a hydrogen bond which increases the stability of the ion lattice. Usually, in energy computations this hydrogen bond is not considered (e.g. reference 1), which leads to a lesser result in computations of ion lattice energy. If, however, the exact ion lattice energy (IE) is known, the important molecular constant - the proton affinity (P) of the molecule - may be computed according to equation (1). The recently obtained value of Ref 3 for the (P) of the water molecule

Card 1/3

Influence of the Hydrogen Bond on the Energy of the SOV/76-33-6-16/44
Ion Lattice of Ammonium Chloride and Evaluation of the Affinity of Ammonia
Molecules to the Proton

is lower by 19 kcal as compared to the value obtained according to Ref 2, which points to the fact that in the computations per (Ref 3) the effect of the hydrogen bond between cation and anion was neglected. From quantum-mechanical computations (Ref 5) of the energy of interaction of the molecule A - H with the atom B (which exhibits an undivided electron pair) the following equation was derived: $W = Q + P_1\omega - P_2$ (2)
(Q = Coulomb energy, $P_1\omega$ = repulsive energy between H and B,
 P_2 = exchange (or donor-acceptor) energy of the attraction between H and B). An investigation is then made of the applicability of equation (2) to the computation of interaction between the cation NH_4^+ and anion Cl^- in the NH_4Cl crystal and it was found that by the selected semiempirical computation method a computation is possible only if $P_2 = 0$ is assumed, by which a lower (IE) is obtained. The change of the (IE) caused by the hydrogen bond is assumed to be of the

Card 2/3

Influence of the Hydrogen Bond on the Energy of the SOV/76-33-6-16/44
Ion Lattice of Ammonium Chloride and Evaluation of the Affinity of Ammonia
Molecules to the Proton

same magnitude as the last mentioned decrease in the (IE).
From this point of view a computation of the lattice energy
for ammonium chloride is made and it is found that the
correction of the computation according to Bleick (Ref 1),
in which the hydrogen bond was neglected, must be of the
magnitude 10 kcal, and, consequently, the value
 $P_{NH_3} = 194 \pm 7$ kcal. There are 1 figure, 1 table, and
10 references, 7 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut khimicheskoy fiziki, Moskva
(Academy of Sciences of the USSR, Institute of Chemical
Physics, Moscow)

SUBMITTED: October 31, 1957

Card 3/3

PSHENICHNOV, Ye.A.; SOKOLOV, N.D.

Polanyi's law for proton transitions and the hydrogen bond. Dokl.
AN SSSR. 137 no. 2:352-355 Mr '61. (MIRA 14:2)

1. Institut khimicheskoy fiziki AN SSSR i Moskovskiy gosudarstvennyy
universitet im.M.V. Lomonoseva. Predstavлено akademikom V.N.
Kondrat'yevym. (Protons) (Hydrogen bonding)

PSHENICHNOV, Ye.A.

Calculation of the correction for the tunnel effect in chemical reactions. Zhur.fiz.khim. 35 no.10:2396-2397 O '61.

1. Akademiya nauk SSSR, Institut khimicheskoy fiziki.
(Chemical reaction, Rate of)
(MIRA 14:11)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343510006-8

S/0129/64/000/007/0019/0021

ACCESSION NR: AP4042344

AUTHOR: Pshenichnov, Yu. P., Mukhayev, V. V.

TITLE: A study of deformation levels in ring shaped samples

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 7, 1964, 19-21

TOPIC TAGS: alloy D16, aluminum alloy, circular sample deformation, sample shape effect, surface condition effect, heat treatment, anodic coating, rolling direction

ABSTRACT: Samples cut from 5-mm-thick sheet aluminum D16 (see Fig. 1a and b in the Enclosure), notched either prior to or after quenching from 505C in cold or boiling water and aged naturally for 96 hours, were rolled parallel or perpendicular to their axes of symmetry. Effects of sample shape, direction of rolling and rate of cooling on deformation was determined from changes in distance A (10 mm, See Fig. 1a). Additionally, anodic coatings of 5-10 μ were deposited on some samples in a sulfuric acid bath and coatings of 20, 30, 40 or 50 μ were deposited on other samples by solid anodizing to test the effects of thickness of anodic coating. Maximal deformation was found in parallel rolled, unnotched samples when these were notched after cold water quenching. A shift in rolling direction by 90° relative to the axis of symmetry reduced the deformation to 25% of its original level.

ACCESSION NR: AP4042344

Deformation increased with the thickness of anodic coating, its character being determined by the direction of rolling. Quenching of unnotched samples, rolled parallel to distance A, in boiling water reduced the deformation to 10% of the levels found in such samples when quenched in cold water. Samples notched after quenching in boiling water were insensitive to reductions in rate of cooling. Unnotched samples are recommended for analyses of the effects of quenching water temperature, notched ones for analyses of the effects of successive operations (i.e. anodizing, hardening, aging, etc.). Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 01

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

2/3

Card

ACCESSION NR: AP4042344

ENCLOSURE: 01

(a) - unnotched (b) - notched

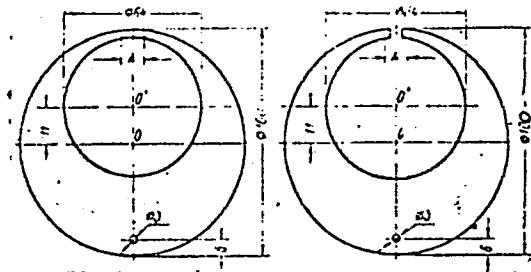


Fig. 1 - Ring shaped samples for study of deformation level and type

Card 1

3/3

PSHENICHNOVA, A.A.

Influence of miotics on vascular permeability of the anterior chamber
of the eye in rabbits under ~~normal~~ conditions and following exclusion
of the ocular nerves. Fiziol. zhur. 46 no.3:344-346 Mr '60.
(MIRA 14:7)

1. From the Laboratory of Nerve Trophics, the I.P.Pavlov Institute of
Physiology of the U.S.S.R. Academy of Sciences and the Leningrad
Ophthalmologic Hospital.

(EYE-BLOOD SUPPLY) (MIOTICS)
(EYE-INNervation)

PSHENICHNOVA, A.A.

Method for quantitative determination of stains in the anterior
chamber of the eye. Fiziol. zhur. 40 no.6:751-755 N-D '54.

(MLRA 8:2)

1. Leningradskiy nauchno-issledovatel'skiy institut glaznykh bolezney.
(FLUORESCIN, determination,
in eye anterior chamber)
(EYE,
determ. of fluorescein in anterior chamber)

PSHENICHNOVA, L.F., ordinator

~~Peritoneal ganglioneuroma.~~ Zdrav.Turk. 2 no.5:42-43
S-0 '58. (MIRA 12:6)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - dots. Ch.B.Bayriyev)
Turkmenskogo gosudarstvennogo meditsinskogo instituta im. I.V.
Stalina.

(ABDOMEN--TUMORS)

PSHENICHNOVA, L.F.

Blood pressure indices during operations on the organs of the abdominal cavity. Zdrav.Turk. 6 no.2:17-20 Mr-Ap '62.

(MIRA 15:11)

1. Iz kafedry fakul'tetskoy khirurgii (zav. dotsent Ch.B.Bayriyev)
Turkmenskogo gosudarstvennogo meditsinskogo instituta.
(ABDOMEN--SURGERY) (BLOOD PRESSURE)

PSHENICHNOVA, L.F. (Ashkhabad, Pervomayskaya ul., 77)

Combination of torsion with intestinal invagination. Vest.khir.
83 no.12:96 D '59. (MIRA 13:5)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - dotsent
Ch.B. Bayriyev) Ashkhabadskogo meditsinskogo instituta.
(INTESTINES--OBSTRUCTIONS)

PSHENICHNIKOVA, N.

Plans are submitted late. Fin.SSSR 38 no.2:79 F '64. (MIRA 17:2)

1. Zaveduyushchaya Narofimskim gorodskim finansovym otdelom Moskovskoy oblasti.

PSHENICHNOVA, N. it.

29290 K voprosu o volynskom rikketsioze. Trudy Molotovsk. gos. stomatol. in-ta,
vyp. 8, 1949, s. 357-65

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

PSHENICHNOVA, N. R.

29290. K voprosu o volynskom rikketsioze. Trudy Molotovsk. gos.
stpb, atol. in-ta, vyp. 8, 1949, s. 357-65

SO: Izvestiya Ak. Nauk Latviyskoy SSR. No. 9, Sept. 1955